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Engineering design of Bird Fauna of water spills in Kazalinsk

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Abstract

© 2018 Authors. Preservation of biodiversity (interspecific, intraspecific) is one of the urgent tasks that requires a systematic, comprehensive, scientifically based approach. Engineering design of the bird life area, includes modeling, packaging the area and its effects on environment. For this purpose we design the procedure by finite element method for biological life of bird. A vivid example of restoration and preservation of biological diversity of fauna and flora should be considered the implementation of the environmental project "Regulation of the riverbed of the Syrdarya and the Northern Aral Sea". The project was initiated by well-known Russian and Kazakh scientists with the support of the government of Kazakhstan and world financial institutions. The aim of the project is the construction of new and reconstruction of existing hydrological structures. The result of this project, among other things (improving the economic, social, environmental situation) is the restoration of biological diversity. The process of recovery is gradual, depends on many external factors and requires detailed study, scientific justification for individual periods and phases. Bird fauna is considered conservative enough in the choice of habitats and is an indicator of the restoration of biodiversity. This paper is devoted to keeping track of bird in the water spills of the Baskara canal (the main left-bank channel of the Syrdarya river) in the eastern part of the Kazalinsky district (Kazakhstan's Aral Sea area). During the surveys, 13 species of birds were recorded, which are representatives of 8 orders. The most part (77%) of registered birds belongs to the limnophilic group - the wetland birds. Impoverished species composition is due to the climatic conditions of the accounting year, the lack of sufficient shelter, the isolation of the water body. Systematic, all-season bird monitoring is required.

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Keywords

Kazalinsky district, The main left-bank canal of Baskara, The Syrdarya River, Wetland avifauna

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